

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Sun, et al

Serial No.: 09/875,597

Filed: 06/06/2001

Group Art Unit: 2858

Examiner: Teresinski, John

Title: STRUCTURAL INTEGRITY MONITORING SYSTEM
INCLUDING WIRELESS ELECTROMECHANICAL
IMPEDANCE MEASUREMENT

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RESPONSE

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Dear Sir:

This paper is responsive to the Office Action mailed on August 4, 2003.

Applicant thanks the Examiner for the remarks and analysis contained in the Office Action and respectfully requests reconsideration of the application.

Applicant respectfully traverses the rejections based upon the combination of Gerardi, et al. and Kasamani et al. The combination cannot be made. It is axiomatic that there must be a sufficient legal motivation to make a combination to establish a prima facie case of obviousness. There is no motivation here because the proposed combination provides no benefit. The Kasanami teachings have no usefulness with the arrangement of the Gerardi arrangement.

The capacitance of the Gerardi sensors is used for measurements (see, e.g., col. 14, lines

9-10, 41-42, 65-67; col. 15, lines 17-19, 32-36). There would be no benefit to adding the resistor 102 of Kasanami as proposed by the Examiner because that would not provide any meaningful additional signal processing of the measured capacitance. Without any benefit, there is no motivation to make the combination and there is no prima facie case of obviousness.

Kasanami teaches using an amplifier 100 to control rotation of a gyroscope. The signals from elements 16b and 16c are used by the amplifier 100 (including the resistor 102) to adjust the excitation signal for the element 16a to control rotation of the gyroscope. There is no rotating gyroscope (or any other caused rotation for that matter) in the Gerardi arrangement. Accordingly, adding a signal processing circuit such as the amplifier 100 with its resistor 102 provides no benefit and there is no prima facie case of obviousness. The Examiner cannot take the resistor 102 out of context and try to splice it into Gerardi's arrangement without using hindsight reasoning, which is not permitted. Taking the references' explicit teachings into consideration leads to only one conclusion -- there is no motivation to make the proposed combination and the claims cannot be considered obvious.

The additional references do not remedy the defects in the proposed base combination of Gerardi et al. and Kasanami et al.

This case is in condition for allowance.

Respectfully submitted,
CARLSON, GASKEY & OLDS

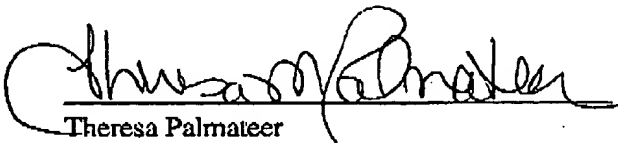
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Dated: Nov. 4, 2003

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that the enclosed Response is being sent to the United States Patent and Trademark Office by facsimile to 703-872-9318, attention Examiner Teresinski, Group Art Unit 2858 on Nov. 4, 2003.


Theresa Palmateer

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